

Company Profile - Biogas Business Unit

Company Overview

IGEC, headquartered in Lecce, Italy, is a leading general contractor specializing in the engineering, procurement, and construction (EPC) of civil and industrial infrastructures. Leveraging extensive industry experience and a commitment to sustainable development, **IGEC** offers comprehensive services that encompass the entire project lifecycle-from initial feasibility studies and design to procurement, construction, and commissioning.

IGEC is your trusted partner to realize your projects.

IGEC is dedicated to advancing the transition to renewable energy by delivering high-quality, efficient, and environmentally friendly energy solutions. The company's vision is to be at the forefront of the renewable energy sector, driving innovation and promoting sustainable practices that contribute to a greener future.



Commitment to Quality and Sustainability

IGEC's dedication to excellence is demonstrated through its adherence to international standards, holding certifications such as:

- ISO 9001:2015 Quality Management Systems
- ISO 14001:2015 Environmental Management Systems
- ISO 45001:2018 Occupational Health and Safety Management Systems
- ISO UNI PdR 125:2022 Gender Equality Management Systems
- ISO 19650-1:2018 Building Information Modelling (BIM) Standards
- ISO 37001:2016 Anti-bribery Management Systems

IGEC has started the certification process for:

- SA8000 Social Accountability
- ISO 30415:2021 Human Resource Management Diversity and Inclusion

These certifications underscore IGEC's commitment to delivering projects that meet rigorous quality and environmental standards.













Biogas Core Services

Engineering, Procurement, and Construction (EPC):

IGEC specializes in the design and construction of biogas facilities that convert organic waste into renewable energy. These plants not only generate electricity but also produce valuable by-products, contributing to a circular economy.

Project Development:

Conducting feasibility studies and site assessments to identify the most suitable renewable energy solutions. Navigating regulatory frameworks and securing necessary permits and incentives.

Site Selection:

Careful site selection is critical for biogas plants, necessitating an analysis of environmental, economic, and logistical factors. Attributes such as proximity to biomass sources, access to energy markets, and compliance with local regulations shape the feasibility and efficiency of the biogas operation.







Biogas Core Services

Plant Layout and Design:

The layout and design of the biogas plant must optimize space utilization and operational efficiency while minimizing environmental impact. Considerations include the arrangement of digesters, gas storage systems, and ancillary equipment to ensure smooth operational flows and preventive strategies for emissions control.

Cost Analysis:

Conducting a thorough cost analysis is essential for understanding the financial feasibility of biogas projects. This includes evaluating investment costs, operational expenses, and potential revenue streams, allowing stakeholders to make informed decisions regarding project viability and resource allocation.

Regulatory Framework and Compliance:

Navigating the regulatory landscape is a fundamental aspect of successfully deploying biogas projects. In this segment, we will outline the local and national regulations that govern biogas operations, emphasizing the importance of understanding compliance requirements. We'll also delve into the necessary permitting processes that help secure project approval and community support, as well as how adherence to environmental standards can not only fulfill legal obligations but also foster a positive image in the eyes of stakeholders.







Project portfolio

IGEC and its technical staff developed the following projects:

- Narni (TR) Nera Montoro biogas plant GreenASM (feedstock 40.000 t/y separate collection of household waste - Dry digester thecnology) design and management. 2011 -2017
- Calimera (LE) biomethane plant (feedstock 30.000 t/y separate collection of household waste Dry digester thechology) 2012 /2021 design coordination permitting and erection.
- Foligno (PG) biomethane plant (feedstock 60.000 t/y separate collection of household waste - Dry digester thecnology) 2015 consultant.
- **Galatina (LE)** biomethane plant (feedstock 36.000 t/y separate collection of household waste + 20.000 t/y agricoltural by-product Dry digester thecnology) 2024 design and permitting.































































